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immunity and their use as cancer vaccines Gaudernack, Gustav; Eriksen, Jon Amund; Moller, Mona; Gjertsen, Marianne IN Klemp; Saeterdal, Ingvil Norsk Hydro Asa, Norway PΑ PCT Int. Appl., 167 pp. SO CODEN: PIXXD2 DTPatent English LA FAN.CNT 1 APPLICATION NO. DATE KIND DATE PATENT NO. -----_____ WO 1999-NO143 19990503 19991118 A2 WO 9958552 PΙ A3 20000302 W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, WO 9958552 DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK,

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Frameshift-mutation-derived peptides as tumor-specific antigens in
AN
     inherited and spontaneous colorectal cancer
TI
     Saeterdal, Ingvil; Bjorheim, Jens; Lislerud, Kari; Gjertsen, Marianne K.;
      Bukholm, Ida K.; Olsen, Ole Christian; Nesland, Jahn M.; Eriksen, Jon
ΑU
      Amund; Moller, Mona; Lindblom, Annika; Gaudernack, Gustav
      The Norwegian Radium Hospital, Department of Immunology, Section for
      Immunotherapy, The Norwegian Radium Hospital, University of Oslo, Oslo,
CS
      Proceedings of the National Academy of Sciences of the United States of
      America (2001), 98(23), 13255-13260
SO
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      National Academy of Sciences
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                THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD
      English
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       Peptides derived from frameshift-mutated genes which elicit T cell
       immunity and their use as cancer vaccines
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       Gaudernack, Gustav; Eriksen, Jon Amund; Moller, Mona; Gjertsen, Marianne
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       Klemp; Saeterdal, Ingvil
       Norsk Hydro Asa, Norway
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       PCT Int. Appl., 167 pp.
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     Gaudernack, Gustav; Eriksen, Jon Amund; Moller, Mona; Gjertsen, Marianne
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REFERENCE 1
    Cancer diagnosis and therapy based on mutations in TGF-.beta. receptors
    Markowitz, Sanford D.; Brattain, Michael G.; Willson, James K. V.
AN
     Case Western Reserve University, USA; Medical College of Ohio
     U.S. 30 pp., Cont.-in-part of U.S. 5,866,323.
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              THERE ARE 97 CITED REFERENCES AVAILABLE FOR THIS RECORD
      US 1999-239864
              ALL CITATIONS AVAILABLE IN THE RE FORMAT
 RE.CNT 97
  REFERENCE 2
      MHC-I-binding transforming growth factor beta receptor II peptides and
      nucleic acids and their uses in diagnosis and therapy of gastric cancer
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       Acres, Bruce
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REFERENCE 3

```
Peptides derived from frameshift-mutated genes which elicit T cell
     immunity and their use as cancer vaccines
     Gaudernack, Gustav; Eriksen, Jon Amund; Moller, Mona; Gjertsen, Marianne
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     Klemp; Saeterdal, Ingvil
     Norsk Hydro Asa, Norway
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     PCT Int. Appl., 167 pp.
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  REFERENCE 4
        Cancer diagnosis, prognosis and therapy based on mutation of receptors for
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        transforming growth factor .beta.
       Markowitz Sanford D.; Brattain, Michael G.; Willson, James K. V.
        Case Western Reserve University, USA; Medical College of Ohio
   IN
        U.S., 27 pp., Cont.-in-part of U.S. Ser. No. 417,867, abandoned.
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```

19960405 WO 1996-US4727 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD US 1999-239864 ALL CITATIONS AVAILABLE IN THE RE FORMAT RE.CNT 19 REFERENCE 5 Colon cancer diagnosis and therapy based on mutations in the gene for the AN transforming growth factor .beta. receptor II ΤI Markowitz, Sanford D.; Brattain, Michael G.; Willson, James K. V. Case Western University, USA; Medical College of Ohio IN PΑ PCT Int. Appl., 69 pp. so CODEN: PIXXD2 Patent DT English LΑ APPLICATION NO. DATE FAN.CNT 3 KIND DATE _____ PATENT NO. WO 1996-US4727 19960405 _____ _ - - ------WO 9631605 PΙ

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